

Work Order ID 59422

Friday, June 04, 2010 9:19:38 AM



Page 1

Item ID: D3500-1

Accept



Setup Start



Revision ID:

Item Name: Saddle

Stop



Start Date: 6/4/2010 Start Qty: 24.00



Cust Item ID:

Required Date: 6/10/2010 Req'd Qty: 24.00



Customer:

Reference:

Approvals: Process Plan:

Date: 10-6-04 Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr	Revision Nbr

100



HAAS CNC VERTICAL MACHINING #1

0.00

B.A 10/06/24
af 10-6-23

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Program Batch No. 59422 Double check by: 1-Machine Step No 1
 per Folio FA641 and inspect per attached Dimension Sheets 2-Machine Step
 No 2 per Folio FA641 and inspect per attached Dimension Sheets 3-Machine
 Step No 3 per Folio FA641 and inspect p

110



QC2- Inspect parts off machine FAI/FAIB

0.00

af 10-6-23
 B.A 10/06/24

QC

Quality Control

Memo

0.00

R.O.

120



QC8- Inspect parts - second check

0.00

S.F 10/06/28

QC

Quality Control

Memo

0.00

IS 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3500-1 PAR #: Fault Category: machining NCR: Yes No DQA: Date: 10/07/08
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: Clean Date: 10/07/08

WORK ORDER NON-CONFORMANCE (NCR)								
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
10/06/08	100	- X origin off by 3.000 - WORK PIECE BEYOND REPAIR - OPERATOR EROR. RC operator error on other shift took origin bad.	OP	- SCRAP AND DON'T REPLACE NO MORE MAT'L	SP 10/06/08	SP 10/06/08	UP 10/06/08	S 10/07/08
	10A		QSI 042	IT	PD 10/06/08		QSI 042	10/07/08

NOTE: Date & initial all entries

Work Order ID 59422

Friday, June 04, 2010 9:19:38 AM



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Item ID: D3500-1

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Setup Start



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Item Name: Saddle

Stop



Start Date: 6/4/2010 Start Qty: 24.00



Cust Item ID:

Required Date: 6/10/2010 Req'd Qty: 24.00



Customer:

Reference:

Approvals:

Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center ID

130



HandFinish

Hand Finishing

Operation
Description

Chemical Conversion Coat per QSI005 4.1

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberReject
Stamp

HJ 10/04/12F

18

g

140



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

M 114841

Memo

0.00

START TIME:

7:40

OVEN TEMPERATURE:

FINISH TIME:

8:10

18 BL 10-6-20

150



QC

Quality Control

QC3- Inspect Part Finish

0.00

Memo

0.00

m 10 06 30 18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 59422

Friday, June 04, 2010 9:19:38 AM



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Item ID: D3500-1

Accept



Setup Start



Revision ID:

Item Name: Saddle

Stop



Start Date: 6/4/2010

Start Qty: 24.00



Cust Item ID:

Required Date: 6/10/2010

Req'd Qty: 24.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop


**Sequence ID/
Work Center ID**

160



Packaging

Packaging

**Operation
Description**
Identify as per dwg & Stock Location: *424*Set Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

0.00

0.00

170



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

6/4/10/01 18
10/07/01 JJ
W 10/07/01

W/O:

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, June 04, 2010 9:19:42 AM

Page 1

Work Order ID: 59422



Parent Item: D3500-1



Parent Item Name: Saddle

Start Date: 6/4/2010

Required Date: 6/10/2010

Comments: IPP Rev:A New Issue 06-06-15 JLM

Start Qty: 24.00

Required Qty: 24.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6102-013 		Manufactured	No			100	Each	1.0000	1	24			

Saddle Billet

Location	Loc Qty	Loc Code
MAT43	1	
41962	1	

B 59467 x 16 + 2 (for tooling) (18)

(1)

6/10/2010

Pulled 2 extra Bullets.
for Tooling for Landing Gear.

JLM 10-06-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD				Work Order:	59422
Description: Saddle				Part Number:	D3500-1
Inspection Dwg: D3500 Rev: C				Page 1 of 1	

Dim	Min	Max	Go/No Go Gauge	Recorded Actual Dimensions				By	Date
				1	2	3	4		
A	0.483	0.490		.485	.485	.485	0.486		
B	1.175	1.185		1.180	1.180	1.180	1.180		
C	3.145	3.155		3.150	3.150	3.150	3.150		
D	1.175	1.185		1.180	1.180	1.180	1.180		
E	0.365	0.385		.375	.375	.375	0.375		
F	0.490	0.510		.500	.500	.500	0.500		
H									
I	R1.575	R1.595		R1.590	R1.590	1.590	1.587		
J	0.240	0.260		.245	.245	.245	0.243		
K	0.490	0.510		.502	.502	.502	0.502		
L	3.590	3.650		3.625	3.625	3.625	3.625		
M	0.315	0.322		.320	.320	.320	0.320		
N	0.256	0.262		.258	.258	.258	0.260		
O	6.500	6.520		6.510	6.510	6.510	6.510		
P	5.990	6.010		6.000	6.000	6.000	6.000		
Q	2.820	2.830		2.823	2.823	2.823	2.823		
R	2.495	2.505		2.498	2.498	2.498	2.500		
S	2.245	2.255		2.250	2.250	2.250	2.250		
T	-1.120	1.130		1.125	1.125	1.125	1.125		
U	0.540	0.560		.545	.545	.545	0.550		
V	0.793	0.803		.798	.798	.798	0.798		
W	R.240	R.260		.250	.250	.250	0.250		
X	0.040	0.060		.060	.060	.060	0.060		
Y	0.100	0.120		.100	.100	.100	0.110		
AA	R1.125	R1.145		R1.140	R1.140	R1.140	1.134		
AB	R.490	R.510		R.500	R.500	.500	0.500		
AC	0.615	0.635		.625	.625	.625	0.620		
AD	0.240	0.260		.245	.245	.245	0.249		
AE	1.810	1.830		1.820	1.820	1.820	1.820		
AF	0.240	0.260		.250	.250	.250	0.250		
AG	0.140	0.160		.152	.152	.152	0.152		
AH	0.140	0.160		.147	.147	.147	0.147		
AI	0.140	0.160		.155	.155	.155	0.152		
Accept/Reject									

Measured by:	<i>pk</i>	Audited by:	<i>SL</i>
Date:	10-6-22	Date:	10/06/22

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC <i>pk</i>	<i>DA</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD				Work Order:			
Description: Saddle				Part Number: D3500-1			
Inspection Dwg: D3500 Rev: C				Page 1 of 1			

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	15	26	27	48	By	Date
A	0.483	0.490		0.486	0.486	0.486	0.486		
B	1.175	1.185		1.180	1.180	1.180	1.180		
C	3.145	3.155		3.150	3.150	3.150	3.150		
D	1.175	1.185		1.180	1.180	1.180	1.180		
E	0.365	0.385		0.375	0.375	0.375	0.375		
F	0.490	0.510		0.500	0.500	0.500	0.500		
H									
I	R1.575	R1.595		1.5929	1.587	1.587	1.587		
J	0.240	0.260		0.248	0.248	0.248	0.247		
K	0.490	0.510		0.502	0.502	0.502	0.502		
L	3.590	3.650		3.625	3.625	3.625	3.625		
M	0.315	0.322		0.317	0.317	0.317	0.317		
N	0.256	0.262		0.260	0.260	0.260	0.260		
O	6.500	6.520		6.510	6.510	6.510	6.510		
P	5.990	6.010		6.000	6.000	6.000	6.000		
Q	2.820	2.830		2.824	2.824	2.824	2.824		
R	2.495	2.505		2.500	2.500	2.500	2.500		
S	2.245	2.255		2.250	2.250	2.250	2.250		
T	1.120	1.130		1.125	1.125	1.125	1.125		
U	0.540	0.560		0.549	0.549	0.550	0.550		
V	0.793	0.803		0.798	0.798	0.798	0.798		
W	R.240	R.260		0.250	0.250	0.250	0.250		
X	0.040	0.060		0.060	0.060	0.060	0.060		
Y	0.100	0.120		0.110	0.110	0.110	0.110		
AA	R1.125	R1.145		1.140	1.134	1.133	1.133		
AB	R.490	R.510		0.500	0.500	0.500	0.500		
AC	0.615	0.635		0.620	0.620	0.620	0.620		
AD	0.240	0.260		0.245	0.250	0.250	0.250		
AE	1.810	1.830		1.820	1.820	1.820	1.820		
AF	0.240	0.260		0.245	0.250	0.250	0.250		
AG	0.140	0.160		0.152	0.152	0.152	0.152		
AH	0.140	0.160		0.147	0.145	0.148	0.147		
AI	0.140	0.160		0.148	0.153	0.153	0.153		
Accept/Reject									

Measured by:	M. A	Audited by:	88
Date:	10/06/24	Date:	10/06/24

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	28 DS

DART AEROSPACE LTD

Work Order:

Description: Saddle

Part Number:

D3500-1

Inspection Dwg: D3500

Rev: C

Page 1 of 1

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.483	0.490		.485	.485	.485	.485		
B	1.175	1.185		1.180	1.180	1.180	1.180		
C	3.145	3.155		3.150	3.150	3.150	3.150		
D	1.175	1.185		1.180	1.180	1.180	1.180		
E	0.365	0.385		.375	.375	.375	.375		
F	0.490	0.510		.500	.500	.500	.500		
H									
I	R1.575	R1.595		1.595	1.595	1.594	1.595		
J	0.240	0.260		.243	.243	.243	.243		
K	0.490	0.510		.502	.502	.502	.502		
L	3.590	3.650		3.625	3.625	3.625	3.625		
M	0.315	0.322		.320	.320	.320	.320		
N	0.256	0.262		.258	.258	.258	.258		
O	6.500	6.520		6.510	6.510	6.510	6.510		
P	5.990	6.010		6.000	6.000	6.000	6.000		
Q	2.820	2.830		2.823	2.823	2.823	2.823		
R	2.495	2.505		2.499	2.499	2.499	2.499		
S	2.245	2.255		2.250	2.250	2.250	2.250		
T	1.120	1.130		1.125	1.125	1.125	1.125		
U	0.540	0.560		.547	.547	.547	.547		
V	0.793	0.803		.798	.798	.798	.798		
W	R.240	R.260		.250	.250	.250	.250		
X	0.040	0.060		.060	.060	.060	.060		
Y	0.100	0.120		.100	.100	.100	.100		
AA	R1.125	R1.145		1.138	1.139	1.141	1.140		
AB	R.490	R.510		.500	.500	.500	.500		
AC	0.615	0.635		.625	.625	.625	.625		
AD	0.240	0.260		.247	.247	.247	.247		
AE	1.810	1.830		1.820	1.820	1.820	1.820		
AF	0.240	0.260		.250	.250	.250	.250		
AG	0.140	0.160		.152	.152	.152	.152		
AH	0.140	0.160		.152	.152	.152	.152		
AI	0.140	0.160		.156	.156	.156	.156		
Accept/Reject									

Measured by: *jkf*

Date: 10.6.26

Audited by: *jkf*

Date: 10/06/26

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC <i>jkf</i>	<i>jkf</i>

DART AEROSPACE LTD				Work Order:			
Description: Saddle				Part Number: D3500-1			
Inspection Dwg: D3500 Rev: C				Page 1 of 1			

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.483	0.490		.485	.485	.485	.485		
B	1.175	1.185		1.180	1.180	1.180	1.180		
C	3.145	3.155		3.150	3.150	3.150	3.150		
D	1.175	1.185		1.180	1.180	1.180	1.180		
E	0.365	0.385		.375	.375	.375	.375		
F	0.490	0.510		.500	.500	.500	.500		
H									
I	R1.575	R1.595		1.595	1.591	1.591	1.591		
J	0.240	0.260		.243	.243	.243	.243		
K	0.490	0.510		.502	.502	.502	.502		
L	3.590	3.650		3.625	3.625	3.625	3.625		
M	0.315	0.322		.320	.320	.320	.320		
N	0.256	0.262		.258	.258	.258	.258		
O	6.500	6.520		6.510	6.510	6.510	6.510		
P	5.990	6.010		6.000	6.000	6.000	6.000		
Q	2.820	2.830		2.823	2.823	2.823	2.823		
R	2.495	2.505		2.499	2.499	2.499	2.499		
S	2.245	2.255		2.250	2.250	2.250	2.250		
T	1.120	1.130		1.125	1.125	1.125	1.125		
U	0.540	0.560		.547	.547	.547	.547		
V	0.793	0.803		.798	.798	.798	.798		
W	R.240	R.260		.250	.250	.250	.250		
X	0.040	0.060		.060	.060	.060	.060		
Y	0.100	0.120		.100	.100	.100	.100		
AA	R1.125	R1.145		1.140	1.138	1.138	1.138		
AB	R.490	R.510		R.500	R.500	R.500	R.500		
AC	0.615	0.635		.625	.625	.625	.625		
AD	0.240	0.260		.247	.247	.247	.247		
AE	1.810	1.830		1.820	1.820	1.820	1.820		
AF	0.240	0.260		.250	.250	.250	.250		
AG	0.140	0.160		.152	.152	.152	.152		
AH	0.140	0.160		.152	.152	.152	.152		
AI	0.140	0.160		.156	.156	.156	.156		
Accept/Reject									

Measured by:	<i>KJ</i>	Audited by:	<i>BB</i>
Date:	10-6-26	Date:	10/06/26

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC <i>BB</i>	<i>DA</i>

DART AEROSPACE LTD

Work Order:

Description: Saddle

Part Number:

D3500-1

Inspection Dwg: D3500

Rev: C

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				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.483	0.490		.485	.485				
B	1.175	1.185		1.180	1.180				
C	3.145	3.155		3.150	3.150				
D	1.175	1.185		1.180	1.180				
E	0.365	0.385		.375	.375				
F	0.490	0.510		-500	-500				
H									
I	R1.575	R1.595		1.593	1.593				
J	0.240	0.260		.245	.245				
K	0.490	0.510		.502	.502				
L	3.590	3.650		3.625	3.625				
M	0.315	0.322		.320	.320				
N	0.256	0.262		.258	.258				
O	6.500	6.520		6.510	6.510				
P	5.990	6.010		6.000	6.000				
Q	2.820	2.830		2.823	2.823				
R	2.495	2.505		2.498	2.498				
S	2.245	2.255		2.250	2.250				
T	1.120	1.130		1.125	1.125				
U	0.540	0.560		.545	.545				
V	0.793	0.803		.798	.798				
W	R.240	R.260		.250	.250				
X	0.040	0.060		.060	.060				
Y	0.100	0.120		.100	.100				
AA	R1.125	R1.145		1.138	1.138				
AB	R.490	R.510		.500	.500				
AC	0.615	0.635		.625	.625				
AD	0.240	0.260		.245	.245				
AE	1.810	1.830		1.820	1.820				
AF	0.240	0.260		.250	.250				
AG	0.140	0.160		.152	.152				
AH	0.140	0.160		.147	.147				
AI	0.140	0.160		.155	.155				
Accept/Reject									

Measured by:

Date: 10.6.26

Audited by:

Date: 10.10.08

Rev	Date	Change	Revised by	Approved
A	06.09.26	New Issue	KJ/EC	
B	08.10.07	Dimension H removed	KJ/DD	
C	08.11.28	Dimension 'M' revised	KJ/EC	JK DS

K.

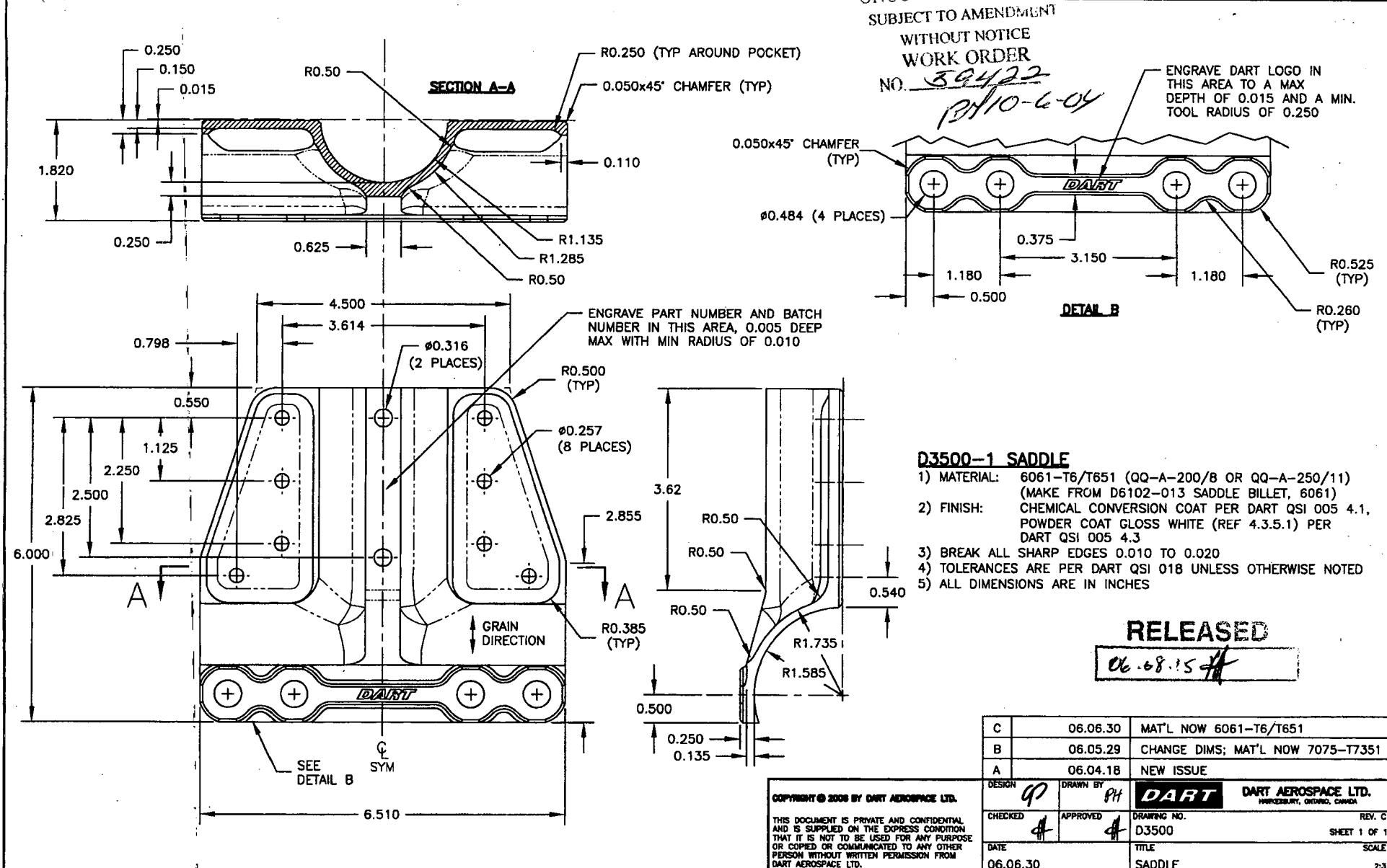
ENGINEERING

UNCONTROLLED DRAFT

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 59422
B710-6-04ENGRAVE DART LOGO IN
THIS AREA TO A MAX
DEPTH OF 0.015 AND A MIN.
TOOL RADIUS OF 0.250

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action - Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

